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CASES OF PNEUMONIA.

Extracted from the Records of the Channing Home Hospital.

[Read before the Boston Society for Medical Observation, April 18th, 1859, and communicated for the Boston Medical and Surgical Journal.]

BY JOHN N. BORLAND, M.D.

Case I.—Jane H., an unmarried Irish servant girl, entered the Channing Home for Sick and Destitute Women on Oct. 30th, 1857. She stated that she was of a healthy family, and had always been well until ten days before entrance. She then "took cold" in an employment office. This cold she neglected. That night she had severe pain and stitch in the right shoulder, which continued, and two days afterward changed its seat to the right side. She kept about, and out, every day until her entrance, although she was constantly chilly, and had considerable cough, pain in her right side, and dyspnœa. She had no cephalic trouble. Cough not very urgent. Expectoration slight, not rusty colored. No pulmonary hæmorrhage, or cardiac trouble. Appetite fair. Bowels have tendency to constipation. Micturition natural. Catamenia normal, and present, last time, a fortnight since.

Appears to be a strong and healthy woman; above average size. Brown hair, blue eyes. Pulse 92. Tongue has a thick white coat, on the middle lobes. Has had one natural dejection this morning. R. Pil. scillæ comp., gr. v., every four hours. Large sinapism over right side to-night. Farinaceous diet.

Nov. 1st.—Slept well in night; feels well to-day. Cough and expectoration much diminished. No pain or chills. Tongue cleaning. Pulse 80.

Physical Signs. Percussion.—Front chests equal, good resonance; same in backs above spines of scapulæ. Left back normal throughout. Right back, at spine of scapula, dulness commences, which increases in amount upon descending, until, at bottom of lung, it is nearly flat.

Auscultation.—Left lung, front and back normal. Right chest, normal in front, and in back above spine of scapula; below this point, where the dulness commences, fine crepitus is heard—this is more marked descending throughout back and beneath axilla; an occasional sonorous râle is heard.

For a small space on seventh and eighth ribs, below axilla, the voice is more resonant than elsewhere, and throughout the right back the voice is louder, and somewhat modified from the healthy sounds.

A cursory examination yesterday showed the crepitus to be even finer and louder than to-day.

Nov. 2d.—Feels better, and is anxious to get up.

3d.—Makes no complaint.

Auscultation.—Râles at lower right back have disappeared; about the angle of the scapula they are coarser in character.

Percussion.—Dulness of right back is much less.

4th.—Sitting up. Complains only of weakness.

5th.—Occasional soreness of right side on deep inspiration. Apply large sinapism to-night.

7th.—In bed at request. Makes no complaint. No râle is to be heard. No difference to be heard on percussion between the two sides.

16th.—Discharged well.

Note of March 16th.—Re-appeared at Hospital, having been well up to four days ago. Again has pneumonia. Sent to Massachusetts General Hospital, where, in forty-eight hours, she died. At autopsy, right lung found in state of gray hepatization. Left congested, œdematous, part of it nearly in red hepatization.

Case II.—Margaret R., married, æt. 34, entered Feb. 28th, 1858. Patient has been seven years in America. Has had seven children, and expects to be again confined in May. Has been generally healthy in Ireland, but not so in this country. Has now been sick twelve days with pneumonia of right lung. In bed. Emaciated, and is very weak. Auburn hair, brown eyes. Pulse 100, hard. No cephalic trouble. Has hard, urgent cough. Expectoration of greenish mucus; says that for the first week of her illness, it was bloody. No appetite. Bowels regular. No renal trouble. Catamenia have been always regular.

Physical Signs.—Resonance of chest on percussion is generally good, except over lower right chest, front and back, where it is duller. Air does not enter the right lung below sixth or seventh rib, nor is the voice heard below that line. R. Olei morrhuæ, ʒ ij. three times a-day. R. ʒi. of cough mixture (No. 5 of Dispensary. R. Bals. copaibæ, ℥ ss.; aq. ammoniæ, ʒi.; aq. communis, ℥ ij.; syrupi bals. tolutani, ℥ ij.; morphiæ sulphatis, gr. ij. M.) every four hours. R. Pulv. ip. et opii, gr. x. at night if needed. Nourishing diet, with eggs and brandy in the forenoon. Wine and water in the afternoon.

Feb. 28th.—Looks, feels and speaks much stronger. Bears the medicine well.

March 2d.—Gaining in flesh and strength. Suffers from cough, which is urgent.

4th.—Complains of soreness throughout chest, with inability to take a long breath. Large sinapism to chest this forenoon, and repeat in the afternoon. Dover's powder at night, if cough.

7th.—Sitting up—improving.

9th.—Severe headache yesterday, with constipated bowels. Took, in the forenoon, infus. sennæ, causing free catharsis at night. To-day, headache less, but is weak.

Auscultation.—In both backs, but loudest in right, are strong, sonorous, mixed with moist, mucous râles. This is heard, to a slight extent, in left upper front chest; in right, the respiration is vesicular. Continue treatment and stimulants.

10th.—Same signs as yesterday, but less strongly marked.

12th.—Restless in night, complaining of pain in head from coughing. Bowels are regularly opened.

14th.—Cough severe. Much pain in head. Flush on cheeks. Resonance, on percussion, in both backs fair. Pulmonary râles are diminished in intensity. Pulse full, 98. R. Tinct. digitalis, gtt. x.; repeat, if necessary, in the afternoon.

17th.—No marked change. Cough continues to be severe. Expectoration is tolerably copious, of same character. Little or no appetite. Bowels are regularly opened. Pulse ranges from 96 to 104. R. Tr. gentianæ comp., ʒ i., every four hours.

21st.—Has remained in the same general condition, but gradually improving since the last report. Cough urgent, rattling. Expectoration difficult, consisting of tough, stringy mucus. Resonance, on percussion, in both backs good. In the right lower back, the sound has returned to a considerable extent, the flatness being confined to a space corresponding to the lower part of the lung. No râles heard on auscultation in the front chests, but in the lowest parts of both backs are coarse, moist, crepitant râles heard; being higher and more distinct on the right side than on the left, though much less marked there than formerly. Medicine is persisted in, and borne well.

24th.—Nauseated by the cough medicine. Omit it. R. Chloroformi, ʒ i.; syr. tolutani, ℥ iij. M. One drachm every three hours.

26th.—Bears medicine well, and is improving.

30th.—As at last report. Improving condition shown in both rational and physical signs.

April 4th.—Steadily gaining. Percussion gives good resonance everywhere. On auscultation, coarse mucous râles are heard, both on inspiration and expiration, in both lower backs; higher up on the right side than on the left.

14th.—Has had no cough for the past week; has gained much in flesh and strength. Resonance good; healthy vesicular respiratory sound heard everywhere. No râle.

14th.—Discharged *well.*

N. B.—Patient continued to do well, and was confined at full term, and did well.

Case III.—Records of this case, for the first five days, were made by Dr. Robert Ware, who then had charge of the Hospital.

Maria G., aged 20; unmarried; seamstress; entered Dec. 18th, 1858. Rather a slight, delicate girl, with dark hair, fair complexion. She was well, up to three weeks ago, when she began to lose her strength and to cough. Within ten days vomiting has come on; at first, it was slight, but latterly she has vomited everything. She kept at work till Wednesday, the 15th, when she became much more ill, and had a severe chill. Since then, cough was accompanied by pain, which was at first general, over the abdomen, but is now at the base of the right chest. Bowels costive till opened by medicine yesterday. Countenance rather prostrated, left cheek flushed; reddish lips. Skin of moderate heat. Pulse 120, rather small. Tongue close white coat. Frequent, short cough. Sputa rusty, viscid. Catamenia present at commencement of illness; they were not stopped at that time.

Physical Signs.—Diminished resonance over lower two thirds of the right back, with distinctly tubular respiration, and an occasional crackling râle. R. Pulv. Doveri, gr. v., every six hours.

Dec. 19th.—Easy night, though considerable cough; pain in side less. Aspect better. Pulse 120. Respiration 36. Tongue as yesterday. Some flush on both cheeks. No vomiting. No dejection. No delirium, which she had (by report of friends) the night before last. Percussion more wanting in resonance than yesterday. Respiration more clearly bronchial, and voice with bronchial souffle. Vibrations not increased. R. Tr. veratri virid., gtt. iij., every three hours. R. Pulv. Doveri, gr. v., every eight hours. In the afternoon, pulse 118. Respiration 40. Increase veratrum viride to four drops.

20th.—Tolerable night, though occasionally has considerable cough. Aspect less bright, and says she is weaker. Complains of pain under right scapula on coughing and taking a long breath, dull to spine of right scapula, with clearly bronchial respiration, and great resonance of voice. At left, the respiration is harsh over lower half of scapula, almost bronchial, and with much crackling râle over back, but no dulness. Pulse 126. Respiration 48. Sputa, as yesterday. Eruption of herpes on upper lip. Tongue with close dryish coat. One dejection. Omit powders. Increase veratrum viride to five drops every three hours. In the afternoon, pulse 118. Respiration clearly bronchial at left back, with dull percussion. Sweating copiously. Two dejections. Dover's powder to-night.

21st.—Pretty good night. Pulse 112. Respiration 56. Complains of pain and distress across base of chest. Tongue cleaner at edges. Took gruel with relish. Continue treatment, and liniment to chest. In the afternoon, pulse 105. Respiration 36. Sweating. Decrease drops to three, every three hours.

23d.—Night better; pain on coughing less. Expectoration less copious, yellowish. Pulse 108. Respiration 40. One dejection last night. Relishes gruel.

24th.—Reports better. Pulse 108. Respiration 38. Tongue red. Breath foul. Sordes on teeth. Sweating less. Cough in night severe. Expectoration slight, yellow. Percussion dull, especially over lower half of left back. In right back, good. Respiratory murmur less in right back, with slight crepitus at end of inspiration. In left back, no râle is heard, but the respiration is loud, harsh and tubular. Cough sounds distant. Sounds of voice over lower left back, high, nasal, approaching œgophony. Continue veratrum and cough mixture.

30th.—Has remained without any alteration in pulse or respiration, since last report, till to-day, when she complains of pain in left side. Pulse 112. Respiration 42. Physical signs as at last report. Increase veratrum viride to five drops.

Jan. 2d.—Improving in general condition. Pulse 104. Breathes easily. Thoracic pains and soreness nearly gone. Appetite improving. Bowels regular.

Physical Signs.—Lying on back. *Percussion* over left front and side of chest, and under axilla, clear and resonant. Same on right side, except that under axilla, the lower half of chest is duller. On backs, above spines of scapulæ, equal and sufficiently resonant. Marked difference below, right side being most dull, the left side being duller than natural, the absence of sound increasing on descending.

Auscultation.—Respiration above both spines vesicular. Right back, from spine of scapula, half way to bottom of lung, respiration is tubular, before coughing; after cough, a loud explosion of moist râles over this space; pectoriloquy, but no œgophony. Below this space, respiration is difficult to catch at any time, and voice sounds external to the chest. Left back, tubular respiration till near the bottom of the chest, where there is total absence of respiration or râles. Voice sounds muffled, hoarse and weak. Over front chests, vesicular respiration above, becoming harder and ruder below; this is most marked on the right side.

From this time on, the patient made a steady progress toward recovery, with gradual improvement in both rational and physical signs, the general plan of treatment remaining the same, and taking nourishing food.

On Feb. 11th, the record says as follows: Reports feeling perfectly well. No disease of any sort discoverable on auscultation or percussion.

Feb. 13th.—Disappeared without a good bye, but well.

ELECTRICITY AS A REMEDY IN NERVOUS DISEASES.

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Electricity in some form or other, as a therapeutic agent, has been employed in this country for the past half century. The cylinder electrical machine of Dr. Franklin's day, producing electricity by friction, was the means mostly employed in the earlier times. The patient, thought to be incurable by every other means, was usually placed upon the insulating chair, or stool, and charged positively, or was "shocked." By the most distinguished physicians and surgeons, as a last resource in grave nervous affections, it was customary to simply order the patient to be "electerised," without the least regard to sensative or motor, compound or ganglionic nerves, nor was the anatomy of the muscles or vessels brought into any special consideration. Such was the sum total of electro-therapeutics along the early part of this century. Yet when, as then thought, *moderately used*, there was evidently produced a changed nervous action, in certain conditions, that obtained for "electrical treatment" no little fame, particularly when used in special cases of palsy, now better understood, and for some chronic, cold rheumatisms, in both of which were produced unmistakably good effects, that were lasting. But we do not learn that any rule was arrived at by which the same could be repeated with any degree of safety or certainty of success. No other remedy brought to bear upon the human body has so rapid, so great, so lasting an effect; hence the chance good secured to some, doubtless led multitudes to try its power, for many of whom it was unreasonable to expect improvement, but rather a lasting harm. Such an indiscriminate use of electricity, particularly that by repeated shocks, as a critical medical treatment, to speak comparatively, was a far more "rough practice" than the random shot of the old fire-lock muskets of the revolution.

From all this, two prevailing impressions have been handed down to our own times, namely: first, that electricity is *the* remedy for palsy; and second, that electricity as a remedy must be horribly "shocking." And here I am inclined to digress for a moment, to allude to a positive evil, not only moral but also physical, produced on boys and girls in the experimental and reckless use of electricity by decided *shocks*, as is so frequently practised at our higher schools. It is known that some teachers allow their scholars to join hands, and thus form a closed circle, including a Leyden jar, or even a battery of jars, charged by an electrical machine. So deeply am I impressed of late with the utter folly and evil consequences of thus trifling with this most powerful and persistent of all nervines—a conviction that has been created by the repeated testimony from the higher walks of life, that has come to me again and again, since engaged in this special practice—that I would as soon think of allowing children to frolic with cutting surgical instruments or fire-arms. There is not wanting testimony from highly respectable families, that young girls, in particular, retain the effects of such *shocks* for years. This is manifested in a tendency to recurrence of pains, or lameness, in the same shoulder, same side of neck or thorax, elbow- or wrist-joint, exactly such as they experienced at the moment of the received shock at school, and which they of themselves date back with no little emphasis to that particular time. Besides, who can tell, or deny, what other modifying effects, which indeed these same cases do not always fail to present, may have been, or may be, stamped upon that youthful and impressible nervous system, that may not a little determine the *ensemble* of nervous action, and of health, for their future life?

On the discovery of the induced current, by Olmstead and Faraday, and the invention of Masson's interrupting wheel, and the various apparatus for producing the to-and-fro interrupted current, the old cylinder or frictional plate machine, for electro-therapeutical purposes, was very much laid aside, which was some twenty years ago. The medical world was much taken with the *portability* of the battery and helix, and for this reason more so still with the magneto-electric machines, whatever might be their relative remedial value. Such means were resorted to all the more, in consequence of the facility and accuracy with which they could be regulated, as to that kind of tension or force, of a so-called continuous current. With these new means for producing immediate physiological effects, and which were certainly attended with some decided curative results, electricity, in this form, became very generally employed by the medical profession; but, alas, too often without a due regard to those conditions and laws which should be invariably observed, when using it. The employment of electro-magnetism and its equivalent, although "*fashionable*," has been entirely too exclusive as to form, too indiscriminate as to the diseased conditions treated, and this has brought odium upon it. Much more have its rare qualities been depreciated in the public esteem by its shameful hawking about in our city and country, by male and female empirics and quacks, who claim to diagnosticate, prognosticate, and cure all diseases by "*Electropathy*"—a very burlesque of science, and of rational medicine. This is to be deprecated much, for two important reasons: first, because electricity is not inert when it is brought to bear upon the human body, either in health or disease; nor is it uncertain or uncontrollable more than other important and valued remedies; and second, when rightly timed and employed, it is capable of relieving, and often perfectly restoring some aggravated cases of irregular nervous action, which no other medication or treatment can reach. Whoever thinks of, reads of, or makes use of electricity as a remedy, with stale *preconceived notions*, or with no definite idea at all, will learn nothing; but, on the other hand, no one can examine this department of therapeutics in the light of the science as it now is, without discovering that electricity as a nerve-remedy is calculated to take a high and important place, which may be termed reinforcement, or "the reserve" of the armamentarium of medical and surgical resources, that is not presumed to be filled by any substitute.

Not infrequently do we hear the following question: "In what cases do you find electricity, as you employ it, to have the most marked beneficial effects?" or, "Do you find that electricity produces any actual permanent good, except for paralysis?" Or, perhaps, "Is it your experience that there is any advantage or disadvantage from choosing this or that form of electric current for any given case, or from this or that *mode* of employing it?" Now such like questions, I must confess, coming as they do from various classes, even from the more highly intelligent in the medical profession, as well as out of it, are to my mind certainly very suggestive, if not instructive. We thus obtain, indirectly, the prevailing public estimate of the reliable curative power of all dynamical electricity, as one form of electricity is here scarcely distinguished from another. In other words, we thus get a view of the uncertain confidence in this agent as a nerve-remedy, brought about in these days by the wide-spread empirical and ridiculous uses made of some forms of electricity, as just alluded to.

It is now demonstrated, however, that the working power of several invaluable kinds of electricity, for highly important remedial purposes, *can be so timed*, *regulated*, *and manipulated*, as to act safely, within the bounds of the human organization, and perfectly consistent with life itself; yet so as to loosen, by its own peculiar catalysis, such chronic dyscrasia, and many abnormal conditions of the nerves and muscles—giving them a tone and tendency to normal action, as well as capability to act, such as no other treatment known to the medical art can do. Indeed, it has come to pass that, for given cases, electricity is *the* remedy, and the only remedy.

While we know that voltaic electricity solves all binary compounds, as water into its elements, salts into their acid and base, also that rapid disorganization takes place at the positive pole, if sufficiently powerful and long continued, and at the same time that there is manifested in fluids, under certain circumstances (as when in cell or spongy mass and affording a certain degree of resistance), a strong tendency to flow from one given pole to the other, by a law of action, and a hundred other electro-physiological phenomena, that can be, and are, reduced to *general principles* and laws, we need not wonder that electricity is capable of being a powerful and reliable remedial agent, but rather should we be led, as indeed we are, to inquire, why more in the domain of the healing art has not been accomplished by it. This is answered again in a breath, if we but inquire how in the name of wonder it is to be expected that such a subtle, nerve-controlling agent, used for such delicate and vital ulterior ends, acting not so much *where* it touches, as according to *how* it touches the living laboratory and nerve-batteries of the disordered human organism, subject to so many exact laws and nice conditions, should be expected to give anything like uniform and reliable results, when so unfairly and unphilosophically employed, as we have seen.

If we set out with the views of the Italian philosophers, Nobilé and Marianini, in the further investigation of the working of this nerve-remedy, which were verified by experiments and laid down as laws by Professor Matteucci, we learn that there are arrangements and circumstances that determine every electric action on animals, so far as these laws apply to the given form and mode of using that electric current, and so far as they apply to the cases and conditions submitted to its action, which are reduced to the following propositions, viz.:—

"1st, Electricity is the only agent which can excite at one time sensation, and at another time contraction, according to the direction in which it is made to traverse a nerve.

"2d, The electric current in passing perpendicularly or transversely across the nerve twigs, or trunks, produces no phenomena due to the excitability of a nerve.

"3d, The electric current has no effect on a nerve, *i. e.*, it neither causes contraction nor sensation, when its action on the nerve is prolonged.

"4th, The electric current alone, can have the power to modify the excitability of a nerve, and even to destroy it, when the current circulates in a certain direction, but can preserve or augment the given excitability, when passing in the opposite direction.

"5th, The electric current, of all agents, is the only one which possesses, for a long space of time, the power to recover the excitability of the nerves, when they have become very much enfeebled, or even dead to other stimuli.

"6th, The electric current, when transmitted along the nerves in the course of their ramification, produces contractions always more energetic, than that which the same current produces when passing along the same nerves, in the opposite direction.

"7th, The out-running current of electricity weakens, and rapidly destroys the excitability of a nerve, while the passage of the inverse current augments it, within certain limits."

It is important to be known in this connection, however, that such conclusions were arrived at mainly from experiments, and not from clinical practice—from mutilated and dead animals, as frogs, or recent corpses, but not from systematic trials on living human beings. It should also be borne in mind that the voltaic pile, as then used, was an unsteady current, for as soon as laid up, it was already diminishing in action; so that any prolonged trials, where there was no repairing force, as there is in the living tissues, gave very different results. Then came into use what might be called the fiercer batteries, *i. e.*, offering more rapid oxydation, which were also somewhat more persistent, and these quantity currents gave quite new results. From the simple one pair of silver and zinc plates moistened with salt, Pulvermacher's chain, Grove or Bunsen batteries, composed of two or more acidulated fluids, with porous diaphragm, up to the voltaic trough, of a hundred pairs, all were more or less unsteady currents, so that any physiological result obtained with any given apparatus, was as to the condition of that apparatus. And such, we are reminded, were the means early used, in common with friction electricity, for all former electro-physiological and therapeutical research. Now it can be easily seen how conflicting and even uncertain must have necessarily been the testimony from trials by the various distinguished observers in this domain of science, based as they were upon facts obtained at their different stand points, which resulted as we know, often, in conflicting opinions and theories, confounding all, and discouraging research.

Then came the induced current of electro-magnetism, which attracted all eyes, and created extravagant hopes; valued all the more, as we have said, for its remarkable steady working, which was long known to be so desirable ; but this current brought with it an entirely new physiological feature. It is a to-and-fro current, necessarily made up simply of a succession of minute shocks, or bits of currents, alternating first this way and then that; the first wave being stronger than the second, when taken together, prevails as the stronger current, and is called the negative, but this is a current very unlike that of the steady workings of a permanent voltaic battery, as that of Daniell's or Smee's batteries, which is also different from that of the friction machine, and hence each has a class of therapeutical, as well as physiological results, peculiarly its own. And these distinctions, in effect, are of exact importance. Had this succession of the means and effects, had this analysis, been made and generally observed, so that all experimental trials, with their given state or condition, and the kind of apparatus employed, been accurately gathered, so as to be classified, we should now be in possession of a material rich in reliable, practical deductions. But up to this present day, cases proper, and others evidently improper—some successfully, and others unsuccessfully treated by *electricity*, as evidence of its power, or incapability—are found scattered through works and reports of various writers, without mentioning what form of electricity was used in the case. But before finishing reading many such articles, we find a casual mention made of " the rapidity of the revolving armatures," or of the helix containing "soft iron wires," or some remark about the " Leyden vial,"—enough to indicate that in these cases it was not the continuous current of a constant battery that gave the peculiar results, but the slow shocks of magneto-electricity, or electro-magnetism, or perhaps frictional electricity, and thus the value of the result is in a greater degree approximated.

Such are doubtless some of the causes why the literature of this branch of science and art is so truly meagre, and still unintelligible, notwithstanding the vastness of the field, and the magnitude of its importance. Here is a new continent for legitimate medical research, and it is to be—will be, improved. Already are distinguished men in France, England, Germany, Italy and Russia, such as Remak and Du Bois Reymond of Prussia, Marianini of Italy, Bequerel and Duchenne in France, Smee, Hearden, Althaus, Richardson in England, and others who are more or less entirely devoting themselves to the study and practice or teaching of this branch of medicine. Electro-therapeutics, in all countries of learning, is being more and more developed, and valued, and will ever be an indispensable part of reliable medicine, holding much the same relation to it, as the telegraph does to the mail—not to supersede it, but to constitute an invaluable accessory.

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CASE OF OVARIOTOMY.

[Read before the Boston Society for Medical Observation, and communicated for the Boston Medical and Surgical Journal.]

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Mrs. Abbott, the subject of this case, was 36 years of age, residing at Washington Village. She had never any irregularity of menstruation, the last period having been completed about two weeks before the operation. Has one child, now ten years old. Enlargement of the abdomen began about two years ago. Dr. G. N. Thompson, under whose care she had been, tapped her six times, each time removing a thick, gluey-looking fluid, highly albuminous, and with a considerable amount of thick, white sediment, like partially-cooked meal. The intervals between the tappings constantly diminished in length, the last being only eleven days.

June 20th, 1859, she was seen by Dr. Gilman Kimball, of Lowell, who made an exploratory incision, about two inches in length, just below the umbilicus, and, passing in a male catheter, found considerable adhesions upon each side. The sac, which appeared, was discharged, and the wound closed with adhesive straps. She was quite comfortable after this, although the wound in the skin did not close.

July 2d, Dr. Thompson finding her respiration exceeding difficult, tapped her again, but the solid contents of the sac prevented any considerable amount of the fluid from escaping.

At her urgent solicitation, and with perfect knowledge on her part of the danger of the operation, I consented to attempt the removal of the tumor, which was done on the 4th of July. Drs.

Thompson, Phipps, L. Parks, Jr., Wm. Read and L. M. Sargent were present and gave their assistance. She inhaled about two and a half pounds of ether during the operation, which lasted about an hour. An incision was made from an inch above the umbilicus nearly to the pubes, which was afterward extended to the ensiform cartilage. The tumor, which then appeared, was tapped, and 18 pints of fluid were allowed to run out. A firm adhesion on the left side (about two square inches) was dissected away. It was old and very firm. Two vessels required ligature. The adhesion on the right side was less firm, and was broken down with the handle of the scalpel. No other adhesions were found. A double silk ligature was passed through the pedicle and tied on either side; another ligature was carried around the whole, and the pedicle was then removed by the scissors. The breadth of the pedicle was about three inches. There were four arteries in it, each as large as a crow quill. The wound was united by twelve sutures, and adhesive straps. The tumor was made up of a large number of cysts, two only of which were discharged during the operation. The operation was completed at 12½, P.M. Pulse, at commencement, 120. Under the influence of ether an hour. At 1½, P.M., gave her a grain of valerianate of morphia. Pulse at that time 120. The morphia was repeated as follows: One half grain at 1.55, 2.40, 3.40, 5.40, 6.40, 10.10, P.M. On the 5th, at 2.10, 6.10, 7.45, 9.45, 11.45, A.M.; 1.15, 2.30, 3.45, 4.45, 5.45, 6.10, 10.30, P.M.

At 4.30, P.M., on the 4th, three hours after the operation, the pulse was 120, skin cool, respiration 24; 9.10, P.M., pulse 108, respiration 24, skin warm, color good. She got four ounces of broth, at 10, P.M. At the same time, six ounces of light-colored urine were taken away by catheter. That night, she slept about one half the time, and took broth twice.

July 5th, 7.30, A.M.—Pulse 96. Respiration 16. Catheter drew off about as much light-colored urine as before. Through the remainder of the treatment the catheter was used about once in eight hours. Through the forenoon of this day, she drank lemonade freely, occasionally a little brandy, and half a pint of broth. At 10½, P.M., the capillary circulation was a little sluggish. Sleeping about one half the time. Pulse varies from 76 to 90, but of good strength. Has had slight nausea, but no vomiting. Respiration 16. Is in good spirits, and has had not the least pain. She says that the relief to her breathing has amply paid for the danger of the operation, whatever the result may be. The morphia was discontinued.

6th.—Has passed a good night. Felt a little faint, and got an ounce of brandy. Nausea very slight. Respiration 12. Pulse less than 100, of good strength, but intermittent. Abdomen tympanitic, as indeed it has been ever since the wound was closed, but she says not more so than it always has been after tapping. At 8, A.M., gave her ext. opii, gr. ij., and repeated it at 11.10, A.M., followed each time by a teacupful of broth. 9.45, P.M., pulse 90, regular and full; 11.30, P.M., she is very much troubled with flatus. The colon can be traced by its distension. I introduced a flexible tube into the rectum, with the hope of relieving her, but nothing passed through it. Gave an enema of warm water with a double acting pump, and drew it away again. This brought away fæcal matter, and about a dozen cherry stones, which were swallowed on the 1st of July, six days ago. Says she is relieved, but the distension still exists. After the enema, got brandy and water. Removed several of the adhesive straps, which were loosening. She passed a good night.

July 7th.—5¼, A.M., pulse 92. 8½, A.M., pulse 80. 4, P.M., pulse 80. 10, P.M., restless, as she says, from the flatus. I noticed a little fresh blood oozing from about the umbilicus. Pulse, however, of good strength; 84 in the minute. Respiration has gone up to 32. Since 5, A.M., has got about a pint of broth. Gave her a grain of ext. opii. The distension of the abdomen is very great, but she has no pain. Says she is glad the operation was performed. 11½, P.M., pulse 84. Respiration 32. Has not slept. Introduced the tube, but could not remove any air from the intestine. 11½, P.M., fell asleep, and waked almost immediately, with a chill. Said she wanted to pass water. Introduced the catheter, and drew off about two ounces, of light urine.

8th, 4, A.M.—Has been very restless. Has taken brandy and water occasionally, but the skin is clammy, pulse 84 and very small. Respiration 32. Restlessness very great. For the last hour, has been wandering at times. 5½, A.M.—Pulse very small, and almost imperceptible. Throwing the arms about, and asking to have her position changed. Says she would rather take valerian than opium. Got a drachm of the fluid extract, and fell asleep. At 6¼, A.M., waked and got another drachm, which she immediately vomited. At 6.35, A.M., she died, without any indication of suffering. Dr. Calvin Ellis was kind enough to make an examination of the body, at 4½, P.M.

There were no signs of peritoneal inflammation. The pedicle was glued down to the side of the pelvis by lymph. One of the ligatures was forced off from its position, apparently by an effusion of blood between the two folds of the peritoneum forming the pedicle. In this was a cavity about an inch in diameter, filled with soft clot. In the cavity of the pelvis was about ten ounces of blood.

"*Memoirs on Diphtheria,*" a volume published by the New Sydenham Society, is issued at a very appropriate moment. It includes five memoirs on Diphthérite by Bretonneau, and memoirs by Guersant, Trousseau, Bouchut, Empis, and Daviot, on the same disease.—*London Lancet.*

Bibliographical Notices.

Transactions of the Medical Society of the State of New York for the year 1859. Albany: Charles Van Benthuysen, Printer, 1859. 8vo., pp. 454.

THE New York Society's Transactions always contain papers of value, and the present volume is behind none of its predecessors in this respect. Among the contents we may mention the admirable Address of the President, Dr. Thomas C. Brinsmade, which we have praised in a former number. Dr. F. H. Hamilton has contributed a paper on fractures of the femur within the capsule, which throws light on a class of injuries that have hitherto proved almost as disastrous to physicians as to patients. Like everything which Dr. Hamilton has written on the subject of fractures and dislocations, it is sound and instructive. A paper on Partial Dislocation of the Shoulder, and consecutive affections of the joint, will be read with interest. The writer makes an allusion to the investigations of Dr. Robert Adams, of Dublin, on Chronic Rheumatic Gout, or what the French call *arthrite chronique sèche*, a disease which has produced many partial dislocations of the joints, which have been considered due to violent causes. The essay on Scarlet Fever, by Dr. Henry A. Carrington, of Hyde Park, is every way worthy of the prize which was conferred upon it. It is an admirable account of the history and treatment of the disease. Dr. Alden March has a paper on Ectopia Cordis, containing two new cases, one of which is illustrated by a beautifully-executed lithographic drawing.

Two interesting papers on the subject of Inversion of the Womb, one by Dr. Quackenbush, of Albany, and the other by Dr. Daniel P. Bissell, of Utica, will be eagerly read by obstetricians. The former physician recommends the following method of effecting reduction: "the inverted uterus should be grasped in the palm of the hand, and compressed firmly, so as to render it less bulky, by having its quantity of blood lessened. It should now be carried up into the vagina and pressed steadily; the vagina will become tense, and re-invert the mouth. Steady pressure should be maintained, and the uterus will continue to double on itself. Evolution takes place, the uterine tumor shortens at its *neck*, complete re-inversion is effected, and no depression or dimpling of the fundus is at any time perceptible; and at no time, by this method, are there more than two layers of the uterus passing through the mouth."

A paper on the Registration of Diseases, by Dr. W. C. Rogers, of Green Island, will have the effect, we hope, of drawing attention to this most important subject. The Diseases of Saratoga County is the subject of an elaborate article by Dr. James Lee, of Mechanicsville Several other shorter articles are scattered through the first part of the volume, which will repay the trouble of perusal.

About a third part of the book is occupied with a reprint of the Transactions of the Society from 1807 to 1831. The proceedings of the last annual meeting, lists of officers and members, and table of contents, complete the volume.

We regret that more care could not have been bestowed on the correction of the proofs, as the book abounds in errors of the press, of every description. Dr. Hamilton has already published in this Journal a list of the *errata* in his article. Where there is so much that is excellent in the Transactions of the New York Society, it is a pity that any volume should be allowed to go forth under its auspices marred by such blemishes. Let the Publishing Committee see that the next volume is properly corrected.

Practical Remarks on Yellow Fever, having Special Reference to Treatment. By Edward Jenner Coxe, M.D. New Orleans: J. C. Morgan & Co. 1859. 12mo., pp. 107.

This little book is the result of an attentive observation of the yellow fever, particularly during the epidemic of 1855, when the author had 192 cases under his care in the Charity Hospital, at New Orleans, of which 117 recovered, and 75 died. It should be stated, however, that 32 patients were hopelessly ill on entrance. Our readers are well acquainted with the enthusiasm and zeal of Dr. Coxe; if these qualities occasionally lead him to adopt, in the treatment of some diseases, a more heroic line of practice than is customary with us at the North, we are bound to say that his views with regard to the treatment of yellow fever are rational and sensible, and that his suggestions on the same subject are judicious. In cases of little severity he chiefly avoids doing harm by unnecessary interference, and especially by the sudorific method, so often employed, which he condemns as highly prejudicial. His method of treatment of the severer forms seems equally judicious, and we can recommend the book as well worthy the perusal of those who have to treat this disease; they will find in it many valuable suggestions.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, AUGUST 4, 1859.

A Cause of Ill Health in Females.—We lately alluded to some of the causes of disease which might, in part, be removed by increased attention to sanitary matters. It only requires a more perfect police to compel the great majority of citizens to be vaccinated, or to prevent the over-crowding of dwellings, and the accumulation of filth. We wish to speak to-day of a few obvious sources of disease, the prevention of which is not in the power of the police, but which must be overcome by the force of public opinion, when that shall become thoroughly aroused to their importance. Few are aware of the amount of disease caused by the over-working of young females. Our attention was strongly attracted to this subject by the case of a poor girl, lately under our care, who requested to be discharged from the Hospital as convalescent. She had entered for a bronchitis of moderate severity, but it was soon discovered that she was in a condition of extreme debility, with that pale chlorotic look which is so indicative of an impoverished state of the blood, caused by want of fresh air, sunlight, exercise, and recreation. She amended slowly, under a good diet, and all the tonic medicine she could bear, including whiskey and fusel oil, and though far from well when she went out, was yet able to do some work. On inquiring as to what she intended to do, we learned that she was going back to the establishment in which she had worked before, at making ladies' visites and mantillas. At this establishment *eighty girls were working together, in a single room, for ten hours daily.* We were also informed that the apartment was badly ventilated, and, indeed, it is difficult to imagine how any room in Boston *could* be ventilated, with such a number of persons in it for ten hours. The rules of the establishment do not permit any of the girls to do half a day's work, or to take their work home with them. If they do not like the terms, there are plenty more who will come in their places. Now how much chance will our patient have of recovering her health; or rather, how long will she keep the little she has, under these circumstances? Would it be at all strange if she broke down at once; or, if able to struggle on a little while longer, the pale cheek should exhibit a hectic flush, the bloated skin give place to emaciation, and cough and night-sweats announce the insidious invasion of pulmonary consumption?

Might not some mitigation to such evils be effected without infringing upon the rights of those who employ these girls? We know it is not to be expected that dealers and manufacturers should pay higher wages than are demanded by the rate of profit which they derive from the labor employed—or what is the same thing, that they should require a fewer number of hours' labor per diem; but certainly some pains might be taken to improve the ventilation of the work-shops, and to diminish the over-crowding, the effects of which are so deleterious. This could not interfere with the profits of any establishment; on the contrary, we believe that a larger amount of work would be accomplished by the same hands than under the present system. It stands to reason that workwomen, under the cheerful influences of pure air, sunlight and space, would accomplish their tasks with greater alacrity, and with better results, than when habitually breathing a poisoned atmosphere.

The class of females whom we have been considering is a very large one, and with the increase of our city it is destined to augment greatly. Apart from the sympathy which they are entitled to receive from us, there is another consideration to which we would call attention. Many of them are destined to become mothers, and to their offspring will be transmitted those constitutional defects which they have acquired by long subjection to noxious influences. The chlorotic or consumptive girl, though she may live to become a wife and a mother, will never rear healthy children, and in this way the standard of health of our population is destined to become seriously impaired.

Such is the apathy with which all suggestions relating to hygiene are received by the public, that we scarcely hope to awaken attention to this subject of general interest and importance. But we feel it to be our duty to protest against this, a single evil, among so many which might be remedied, we do not say with ease, but which still *might* be remedied, and whose existence is, at least, remarkable, when we consider the extent of our knowledge of hygiene, and the unceasing efforts of the medical profession to awaken in the public mind a sense of its importance.

Solution Protoxide of Iron.—*Messrs. Editors,*—The honesty and worth of this preparation, as prepared by me, having been recently called in question, I beg leave to call your attention to the annexed report and analysis, by Dr. A. A. Hayes.

And remain, very respectfully yours, **Charles T. Carney.**

Charles T. Carney, Esq.,

Dear Sir,—I have made chemical analyses of your preparation of Protoxide of Iron, and submit to you the results. The samples were obtained from different sources, and corresponded so closely in composition that no question in regard to uniformity can arise. They were all labelled "Solution Protoxide of Iron." "This is a permanent Solution of Protoxide of Iron, containing 20 grains in each fluid ounce."

Physical Characters.—The fluid was perfectly transparent, of an olive-green color; it had the odor of oil of wintergreen, and taste of a proto-salt of iron dissolved in sugar-syrup. sp. gr. 1.175.

Chemical Characters.—By evaporation and a subsequent separation of the iron compound, a syrup of cane sugar was left. Citric acid was present in the iron compound; diluted with distilled water at different points of dilution it remained clear. Neither the diluted nor original solution was changed by exposure several days to air at 85 deg. F.

Metallic Iron—placed in the boiling diluted solution after a long time produced no change in it when contained in partly closed or open vessels.

Ferro Cyanide of Potassium—in the diluted fluid produced a bluish-white turbidness, which in the colored fluid had a green tinge; a precipitate formed which did not change color on exposure.

Ferrid Cyanide of Potassium.—A greenish-blue precipitate which does not deepen in color.

Tincture of Galls.—Merely darkened the olive tint of the solution, which remained transparent without change.

Solution of Carbonate of Soda.—No effervescence or turbidness even in heated solutions; the transparent fluid becomes deeper colored and does not deposit any oxide after repose.

Solution of Ammonia.—At the instant of addition a green tint, becoming dark-brownish green without any trace of a precipitate.

Solution of Chloride of Barium.—In an acidulated solution produced a slight cloudiness due to a trace of sulphate of soda.

Sulphydric Acid, in a warm acidulated solution, did not produce any change.

Corks, containing gallic and tannic acids, dipped in the fluid and exposed to air, showed greenish tints in the cavities; closed solutions do not change the color of corks.

These are the characters of a protoxide or salt of iron, not simply in solution in, but in combination with sugar of syrup.

Analysis.—One fluid ounce afforded

Protoxide of iron, anhydrous - - - - - - - -	3.59
Crystallized citric acid - - - - - - - - - -	7.09
Sulphate of soda, traces - - - - - - - - - -	-
Fluid grains sugar syrup, by diff. - - - - - -	469.32
	480.00

If we consider the citric acid united to the oxide of iron, we shall have the acid united to about two thirds of the oxide present, forming a mono-citrate of iron; while one third of the oxide of iron is combined with the sugar. As the presence of the acid is not necessary to the solution of the oxide, which by the beautiful process adopted dissolves freely in the sugar solution, and the re-agents prove the oxide united to the sugar, it is probable that a double compound is formed of mono-citrate and sugar, and oxide and sugar.

There being no known way of determining the state of hydration, I have given the weight of dry Protoxide and Crystallized Citric Acid together, weighing 10 68-100 grains in a fluid ounce of the Solution.

From our knowledge of similar combinations, the sugar and water taken

by the compound may be assumed to weigh as much as the two dry constituents, which renders the statement of 20 grains of the compound in one fluid ounce, RATHER BELOW THE TRUTH.

I am acquainted with the fact that many years since this Protoxide Solution, which you have modified and improved, was prepared by a distinguished foreign pharmaceutist, and adopted by physicians of eminence in practice. It has never to my knowledge been offered by you as a novelty or an empirical preparation, unsanctioned by medical authority.

It is well known to chemists and pharmaceutists that Protoxide Compounds of Iron can hardly be protected from increased oxidation on exposure. The characters here given prove that this Solution possesses this desirable quality of permanency, and that a large part of the Proto-oxide present is COMBINED WITH SUGAR ALONE.

Respectfully, A. A. HAYES, M.D.,
Consulting Chemist and State Assayer.

UNCHANGEABLE SOLUTION OF PROTOXIDE OF IRON.—*Messrs. Editors.* Your number for July 14th, 1859, contains an article with the above caption, from Dr. Charles H. Allen, which appears to me to convey to the medical public an attack upon the fairness and honor of a skilful pharmaceutist.

It also presents a misconception of the chemical composition of the solution named, and recommends, in medical practice, a preparation which is perhaps unknown to the profession.

Mr. Charles T. Carney, educated as a scientific and practical chemist and pharmaceutist, and well known for fidelity and accuracy in the execution of important duties in this connection, an active member of the Massachusetts College of Pharmacy and American Pharmaceutical Association, is charged with a serious offence.

We are told that Messrs. Nichols & Co. "made and introduced, some months ago," a preparation of iron bearing the name of Unchangeable Solution of Protoxide of Iron, and that Charles T. Carney has been guilty of "throwing into the market a liquid differing in taste and color," and "in appearance," from "one originally introduced by the other manufacturers," and that this liquid "bearing the same name" has *other* characters, making it essentially different.

Accepting Dr. Allen's statements respecting the difference in physical characters of the two solutions named, I give the labels attached to the bottles, as sold. "Unchangeable Solution of Protoxide of Iron." "Jas. R. Nichols & Co., 7 Central St., Boston." "The isolation and protection of the Protoxide salt of Iron is in this preparation fully accomplished, and is the most valuable of the iron combinations. There is contained in each tablespoonful about 5 grs. of the Iron Salt, which amount may be administered 2 or 3 times in 24 hours." This is "the agreeable and efficient form of iron" which Dr. Allen recommends.

Mr. Carney's bottles are labelled "Solution Protoxide of Iron." "This is a permanent solution of Protoxide of Iron, containing 20 grains in each fl. ounce."

Without here alluding to the fact, that Mr. Carney made and sold this solution before Nichols & Co. were manufacturers, it does not appear that Dr. Allen has the slightest foundation for his statement that "Recently, however, a liquid bearing the same name" "has been thrown into the market by Charles T. Carney."

Dr. Allen must also be held responsible for the statement, that Carney's solution "*contains no free protoxide of iron,* but does contain

4.09 grains to the ounce of citrate of iron, with excess of citric acid." Turning to the characters of Carney's solution, as given by Dr. Allen, any one having knowledge of the behavior of proto-salts of iron, will see that his observations on the actions of re-agents, such as the gallic acid in corks, ammonia, and carbonate of soda, establish beyond all question the fact, that Carney's solution *contains* the *protoxide* of iron *alone*. I have preferred to allow Dr. Allen's own words to contradict his statements, and will now call attention to the characters and composition of the preparation he recommends.

In obtaining the specimens which were subjected to analysis, the same course was pursued as that adopted in a recent analysis of Mr. Carney's. I had a sealed bottle purchased at the warehouse of Messrs. Nichols & Co., and the stock bottles of three of our most respectable apothecaries for confirmation of the results.

Physical Characters.—A dense greenish-brown liquid, having a deposit at the bottom of the bottle. Taste sweet and astringent, followed by a strong chalybeate impression. Sp. grav. 1.276.

Chemical Characters.—By evaporation and the subsequent separation of the salt of iron, a solution of cane sugar remained. Acetic acid, in union with oxide of iron, and a little sulphuric acid, were found.

When the fluid was diluted with distilled water, at different densities, it became turbid, and deposited yellowish-brown flocks. The stock bottles containing the solution exhibited an incrustation, or a pellicle of a deutoxide basic salt of iron.

When the recently-opened solution had been exposed in an open vessel to the air at 85 deg. F., a strong film of basic deutoxide salt had formed on its surface.

Metallic iron, placed in a warm or boiling solution, either strong or diluted, recently poured from the closed bottle and protected from the air, decomposed it at once, with a separation of deutoxide of iron.

Ferro cyanide of potassium: in the diluted solution, gave a deep blue precipitate, becoming darker on exposure.

Ferrid cyanide of potassium: in the diluted solution, gave a dark indigo blue precipitate.

Tincture of galls: instantly an ink-like, black, turbid liquor; a black precipitate deposited.

Carbonate of Soda: either the dense or diluted solution is instantly decomposed.

Ammonia: the solution drops its iron oxide; and when heated, all but a mere trace of the oxide can be thus removed from the solution.

Chloride of Barium: in an acidulated solution, affords a precipitate of sulphate of baryta.

Sulphydric acid, in the same, renders the fluid cloudy from decomposition, and the sulphur separated contains a trace of lead or copper.

Corks, which contain gallic and tannic acids, take a black color without exposure to air in the solution.

These, with other characters, demonstrate that the solution contains a ferroso-ferric salt of iron, dissolved in sugar syrup, and not in combination with it. Not a trace of *protoxide of iron* could be detected in any of the samples, and the fact noticed by Dr. Allen of the corks being blackened, proves that the solution, when sealed, contains ferroso-ferric salt, as proto-salts do not blacken corks.

Analysis.—One fluid ounce of the "Unchangeable Solution of Protoxide of Iron" afforded

Ferroso-ferric oxide of iron	3.76
Cryst. acetic acid	6.00
Sulphate of soda and sulphuric acid	.78
Fluid measure of sugar syrup, by difference	469.46
	480.00 grs.

Considering the ferroso-ferric oxide as dry, and the acetic acid as crystallized, we have $9\frac{76}{100}$ grains of dry salt in a fluid ounce of this preparation. The amount of water of crystallization, which acetate of ferroso-ferric oxide takes, has not been determined.

The results prove that an oxidized solution of acetate of iron dissolved in sugar syrup, forming this "unchangeable solution," follows the natural law, and absorbing oxygen from the atmosphere, is constantly advancing to a deutoxide state.

Mr. Carney has published the analysis of the preparation he offers for sale, and if the reader will turn to the composition of that, he will see that Mr. Carney has not "thrown into the market" such a compound as is here described. Had he done so great injustice to the public, I should have felt justified in asking his expulsion from the highly respectable body of Pharmaceutists and Apothecaries, on which physicians have confidently relied.

In regard to this changing—"unchangeable"—solution of ferroso-ferric oxide, as no *protoxide of iron* is present in the fluid, it cannot be safely used for influencing those changes which depend on the exhibition of the easily assimilated protoxide combinations.

It is a compound which, long known, has been dropped as an officinal preparation, while its equivalent, the pyrolignate of iron, is largely consumed in calico printing as a cheap mordant.

A. A. Hayes, M.D.,
State Assayer.

16 *Boylston Street, Boston, July* 23, 1859.

The City Hospital of Chicago is completed, and is to be opened for the reception of patients and for clinical instruction. The medical board consists of: *Physicians*, Drs. D. Laskie Miller, Joseph K. Ross, Samuel C. Blake. *Surgeons*, Drs. Daniel Brainard, Geo. K. Amerman, Geo. Schlœtzer.—*Med. and Surg. Reporter*.

Errata.—In our last issue, page 519, line 2, for "point," read *joint*; same page, line 24, for "amputated limbs," read *limbs amputated*.

Communications Received.—Quinine in Typhoid Fever.—Epilepsy successfully treated with Strychnia and Nitrate of Silver.—Notice of Michelet's "L'Amour."—Translations from foreign journals.

Books and Pamphlets Received.—Gross's System of Surgery. (From Blanchard & Lea.)—First Annual Announcement of the Veterinary College of Philadelphia.—Report on the Smallpox in the City of Providence. By Edwin M. Snow, M.D., Superintendent of Health.

Died,—In Rowley, July 28th, Dr. Richard Herbert, aged 61 years.—In Providence, R. I., 26th ult., Thomas P. Moore, M.D., of Warren.

Deaths in Boston for the week ending Saturday noon, July 30th, 77. Males, 40—Females, 37.—Accident, 1—asthma, 1—inflammation of the brain, 1—congestion of the brain, 1—consumption, 7—convulsions, 2—cholera infantum, 12—dysentery, 4—dropsy in the head, 4—drowned, 3—debility, 2—infantile diseases, 4—puerperal disease, 1—erysipelas, 1—scarlet fever, 3—typhoid fever, 3—homicide, 1—disease of the heart, 2—disease of the kidneys, 1—inflammation of the lungs, 2—marasmus, 3—old age, 3—disease of the spine, 1—smallpox, 2—scalded, 1—teething, 4—tumor, 1—unknown, 3—varioloid, 1—whooping cough, 2.

Under 5 years, 45—between 5 and 20 years, 10—between 20 and 40 years, 5—between 40 and 60 years, 10—above 60 years, 7. Born in the United States, 64—Ireland, 11—other places, 2.